

REMARKS

Claims 34 – 55 are pending. Claim 55 is canceled. Claims 34 – 54 are amended to further clarify the invention.

The correct Serial number and Group Art number are now on the claims listing.

Claims 35 – 54 are amended to begin with “The” instead of “A” as suggested by the Examiner.

I. Rejection under 35 U.S.C. 112 second paragraph

Claims 34-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The examiner states that “Claim 34 is vague and indefinite in that there is no clear correlation between the preamble and the body of the claim. It is apparent that the method is intended to prepare one or more crystallized pleuromutilins.”

Claim 34 is amended to include the term “crystallized” before pleuromutilins as suggested by the Examiner.

- b. The examiner states that “Claim 35 is vague and indefinite in that there is no clear antecedent basis for “the extracted pleuromutilins (step b) or “the concentrated pleuromutilins (step c)”.

Claim 35 is amended to include the “the extracted pleuromutilins of step b” and “the concentrated pleuromutilins of step c”. This gives the antecedent basis for the extracted pleuromutilins and the concentrated pleuromutilins.

- c. The examiner states that “Claims 41, 50 and 54 confusing in lacking clear antecedent basis for “the aqueous solution prior to extraction.”

Claim 41 is amended to replace "aqueous solution" with "liquid culture medium" as written in claim 34.

Claims 50 and 54 do not have the term “the aqueous solution prior to extraction.” They have been amended as described below.

- d. The examiner states that “In claim 43 it is unclear what is intended by “20% to 45% w/w”.

Claim 43 is amended to read “wherein the pleuromutilins in step c are concentrated in MIBK to a concentration of 20% to 45% w/w” to clarify.

- e. The examiner states that Claim 45 is confusing in the recitation of “the initial temperature of the MIBK”...is, since claim 34 requests the use of a mixture in step d.

Claim 45 is amended to recite “MIBK containing solution used for recrystallisation” to clarify what mixture is used.

- f. The examiner states that “Claim 47 is confusing in that it is unclear what is intended by 1 to 1.5 volumes of heptane in this context. How is the volume to be determined?”

Claim 47 is amended to state that the heptane is added in step d. It should be apparent to a person skilled in the art that this volume is determined according to how much volume remains from step c.

- g. The examiner states that Claim 48 lacks antecedent basis in claim 34 for “the crystallised pleuromutilins”.

Claim 48 is amended to insert "which are the product of step d" after "crystallised pleuromutilins" to give antecedent basis.

- h. The examiner states that “Claims 49 and 53 are vague and indefinite in that it is unclear how selective removal is carried out as claimed. Is the mutilin 14 – acetate recovered or does it disappear?”

Claims are amended to replace "with" by "from". A skilled person should know that recrystallisation is a process which causes removal of impurities, in this case the mutilin 14 acetate.

- i. The examiner states that Claim 52 is vague, indefinite and confusing in the recitation of “followed by heptane addition”, since heptane is present initially in claim 34.

Claim 52 is amended to state "wherein the MIBK and heptane mixture of step d is cooled to 0-5°C after heptane addition" to clarify.

- j. The examiner states that Claims 43-44, 50 and 53 is confusing in that it is unclear how the “concentrations” are to be determined in this context, since the weights intended are unclear.

Claims 43 and 44 are amended to read "wherein the pleuromutilins in step c are concentrated in MIBK to a concentration of 20% to 45% w/w" to clarify the concentrations.

Claim 50 is amended by replacing "used for recrystallisation" with "in ethyl acetate and heptane as recrystallisation solvent" to clarify.

Claim 54 (I believe the Examiner meant 54, not 53) is amended by replacing "used for recrystallisation" with "in MIBK and heptane as recrystallisation solvent" to clarify.

- k. Claim 55 is confusing in that the object of "the initial temperature" is uncertain in this context. In other words, the step intended cannot be ascertained.

Claim 55 is canceled.

- l. Claims 36 and 52 are objected to under 37 CFR 1.75, as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 36 is amended to insert the structure of pleuromutilin as suggested by the Examiner.

Claim 52 is amended to state "wherein the MIBK and heptane mixture of step d is cooled to 0-5° C after heptane addition".

It is believed that with the amendments, the rejections under 35 USC 112, second paragraph have been addressed and the rejections should be removed. No new matter has been added.

II. Rejection under 35 U.S.C. 112, first paragraph

Claims 38-39 are rejected under 35 U.S.C. 112, first paragraph as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The invention appears to employ specific strains. It is not clear if the written description is sufficiently repeatable to avoid the need for a deposit. Further it is unclear if the starting materials were readily available to the public at the time of invention.

The rejection under 35 USC 112 first paragraph is respectfully traversed. The organisms used to produce pleuromutilins are well known in the art. Applicants have described these in the specification and the documents referred to therein. The pleuromutilin producing organisms from which pleuromutilins may be derived are well known and have been used to generate pleuromutilins for years (see pages 1-2 of the specification). Moreover the specification at pages 3 - 4 refers also to a number of specific strains of microorganisms which can be used in the process (but the process is not limited to these) known to produce pleuromutilins and which have been deposited (not by applicants) at the CBS or NRRL.

(From pages 3 – 4 of the specification)

The pleuromutilins-producing microorganism may be any microorganism capable of producing one or more pleuromutilins. Preferably, the pleuromutilins-producing microorganism used in the process of the present invention is a *Clitopilus* species, for instance *Clitopilus passeckerianus* NRRL 3100/DSM 1602, *Clitopilus passeckerianus* CBS 299.35, *Clitopilus passeckerianus* CBS 330.85, *Clitopilus pinsitus* CBS 623.70 or *Clitopilus hobsonii* CBS 270.36; an *Octojuga* species, for instance *Octojuga pseudopinsitus* NRRL11179; a *Gerronema* species, for instance *Gerronema josserandii* CBS 309.36; or a mutant of any such species. The pleuromutilins-producing microorganism may also be a *Psathyrella* species, for instance *Psathyrella subatrata* CBS 325.39, or a mutant of such species. Particularly preferred is a *Clitopilus* species or a mutant thereof, especially *Clitopilus passeckerianus* NRRL 3100 or a mutant thereof.

Serial No.: 10/524/099

Group Art Unit: 1651

Since these strains have already been deposited and are available, applicant should not need to deposit them.

Should the Examiner have any questions or wish to discuss any aspect of this case, the Examiner is encouraged to call the undersigned agent at the number below.

Respectfully submitted,

\Linda E. Hall\

Linda E. Hall
Attorney for Applicant
Registration no. 31,763

GLAXOSMITHKLINE

Corporate Intellectual Property – UW2220

PO Box 1539

King of Prussia, PA 19406-0939

Phone (610) 270-5016

Facsimile (610) 270-5090

n:\leh\cases\p33093\e_file_response_12aug08\response_oa_1a.doc